DOCUMENT RESUME

ED 144 733 RC 010 071

AUTHOR Byrne, David R.
TITLE Chicano Students and Tooele Schools: A Descriptive Research Report.
PUB DATE 24 Jan 74
NOTE 30p.

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS Academic Achievement; Age; Comparative Analysis; *Dropout Rate; *Dropout Research; Family Background; High School Graduates; Intelligence Differences; *Longitudinal Studies; *Secondary School Students; Sex Differences; *Spanish Speaking
IDENTIFIERS *Chicanos; Spanish Surnamed; *Tooele School District UT; Utah

ABSTRACT

The longitudinal study examined the dropout rate of a group of Chicano students who were registered 7th graders in the Tooele School District in the 1967-68 school year. If these students made normal progress, they graduated from high school at the end of the 1972-73 school year. All Spanish-surname students found on the 7th grade rosters of 1967-68 in the district were identified using a Spanish-surname list of the U.S. Census Bureau. Of the 60 students originally identified, 11 were dropped due to their transferring to another school or having died. School records were used to obtain data. About half of the 49 students (47%) dropped out of school between the 7th and 12th grades. It was found that two distinct groups of dropouts could be identified: the low achiever from the early elementary grades, and the student who performed normally until about grade six and thereafter performed less well. Other findings included: girls dropped out at a higher rate than boys; 70% of the dropouts left school after the 10th grade (39% left in the 12th grade); marriage was the most common reason given for girls dropping out while academic failure was the most common reason given for boys; dropouts tended to miss more school than graduates; dropouts had a tendency to score lower on I.Q. instruments than graduates; and both parents, mothers and fathers, of graduates tended to be more educated than the parents of dropouts. (NQ)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

rec 03-10-77

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED144733

Abstract of Study
by
David R. Byrne

CHICANO STUDENTS AND TOOELE SCHOOLS: A DESCRIPTIVE RESEARCH REPORT

This paper reports the findings of a longitudinal study of a group of Chicano secondary school students in Tooele School District. About half of the forty-nine students dropped out of school between the seventh and 12th grades. The study reports several findings of interest in dropout studies. These include: 1) the age and grade level of dropouts, 2) the reasons for leaving school, 3) school performance of dropouts and non-dropouts, 4) intelligence of dropouts and non-dropouts, 5) family background characteristics of dropouts and non-dropouts, and 6) achievement test data on dropouts, non-dropouts and comparable scores from a study in Salt Lake City School District.

It was found that two distinct groups of dropouts could be identified: 1) the low achiever from the early elementary grades, and 2) the student who performs normally until about grade six and thereafter performing less well. Several recommendations were made.

RC010071

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
David R. Byrne
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND THE ERIC SYSTEM CONTRACTORS."

CHICANO STUDENTS AND TOOELE SCHOOLS:

A DESCRIPTIVE RESEARCH REPORT

David R. Byrne
Assistant Professor
Department of Educational Administration
University of Utah

January 24, 1974

INTRODUCTION

This paper reports the findings of a longitudinal study of a group of Chicano secondary school students in Tooele School district. The students studied were registered seventh graders in the Tooele district in the school year of 1967-68 and if they made normal progress graduated from high school at the end of the 1972-73 school year.

Study Population

As is common in studies of Chicano students, the Spanish-surname was used to identify the population. All Spanish-surname students found on the seventh grade rosters of 1967-68 in the district were identified using a Spanish-surname list of the United States Census Bureau. Once identified this group of students became the population for the study.

There are obvious limitations to this method. First, some students may be Chicano and not have a Spanish-surname. There seems, however, to be no method other than guess or opinion to identify those students. Further one may argue that the school may not respond similarly to the name Jones as it does to the name Rivera. Second, this study controlled out any student with a Spanish-surname who joined this group of students after the seventh grade. This was done to find an accurate drop-out rate of students rather than simply computing the difference in numbers of students beginning in a program and the number of students completing a program, a typical dropout study procedure.

The author of this report did a similar study of Chicano students in Salt Lake City three years ago. Where the kinds of data are appropriate comparisons of the findings are included in this report. Caution must be followed from concluding any definitive conclusions about the two districts. These comparisons should be held in the light of interest and speculation and no judgment is made here by the author and should not be made by the reader.

STUDY FINDINGS

Dropout Rate

The original identification of Spanish-surname students totaled sixty persons. An extensive search of records led to the following charted data on what happened to those sixty students.

Distribution of Original Group

(N:60)	Transfer	Death	Dropouts	Graduates
	9	2	23	26

Those eleven students either transferring or having died must be removed from the consideration of dropout rate. It should be noted that a notation of transfer was only made when evidence of request from another school district existed. Subtraction of those eleven students made the actual study group forty-nine students. This is a relatively small number but it must be born in mind that they constitute a total population rather than a sample and secondly that much of the data extend over a 6 year period. The table below shows the dropout rate for the study group by sex and for the total group:

Dropouts of Study Group in Percent

	Girls (26)	Boys (23)	Total (49)
Dropout	.50	.43	.47
Graduate	.50	.57	.53

What this means is that 47 percent of the Chicano students under study dropped out between the seventh grade and completion of the twelfth grade.

Further, girls dropped out at a higher rate than boys. The table on the next page shows the percent of the study group dropping out in each of the respective grade levels under consideration.

Percent of Study Group Dropout at Grade Levels

(N=49)

Grade Level	7th	8th	9th	10th	11th	12th
Percent Out	-	2%	4%	8%	15%	18%

Along with this information its interesting to note that 70 percent of the dropouts left school after the tenth grade and that 39% of the dropping out occurred in the 12th grade.

When one looks at the findings of this study on dropout rate and the findings of the earlier study in Salt Lake City district the following comparisons are of interest:

1. Forty-seven percent of study group dropped out in Tooele and forty-five percent of the study group dropped out in Salt Lake City.
2. Girls dropped out more frequently than boys in Tooele; the opposite was found in Salt Lake City.
3. In Tooele the majority of dropping out occurred after the 10th grade; in Salt Lake City the majority occurred before and during the tenth grade.

Age

The table below plots the percent of dropouts and graduates in various age groups in May of 1973.

Years	17-6 to 18	18 to 18-6	18-6 to 19	19 to 19-6
Dropouts	31%	52%	--	17%
Graduates	62%	23%	11%	4%

Although the graduates tended to be younger than dropouts more than 80 percent of both groups were eighteen years and six months or younger.

Compared to the Salt Lake City study one finds a great deal more uniformity

between dropouts and non-dropouts in Tooele. In Salt Lake City they tended to be in the above eighteen categories and the non-dropouts below eighteen.

Reasons for leaving school

The records of girls dropping out of school gave the following reasons for the action:

1. Non-attendance
2. Academic failure
3. Incorrigible
4. Marriage

Of these, marriage was the most common reason found.

The records of boys dropping out of school gave the following reasons for the action:

1. Improper behavior and obscenity
2. Academic failure
3. Non-attendance

Of these, academic failure was the most common reason given.

In the Salt Lake City study for both boys and girls the most common reason for dropping out was recorded as "dislike of school."

SCHOOL PERFORMANCE

This section discusses what might be called the official markers of educational ability and progress. The school records of the study group were used to collect information on the following: school attendance, I.Q. testing, grade point average, and standardized testing.

It should be made clear that this analysis is presented with a full understanding of the serious question that may be raised in evaluating Chicanos and other ethnic minority students with culturally biased instruments. It is not the purpose of this report to engage in either a justification or refutation of such practice,

but simply to report on the performance of the students under consideration.

Attendance

The following table displays the pattern of school attendance for dropouts and graduates.

	Attendance Patterns		
	Elementary	Jr. High	High School
Dropouts			
Mean days absence	10	15	28
Range	1-31	1-62	5-93
Graduates			
Mean days absence	7	8	9
Range	0-25	0-19	2-27

Two obvious points may be made from this information:

1. Dropouts tend to miss more school than graduates and the difference increases as they move ahead in school.
2. Graduate attendance remains fairly constant throughout their school careers while dropouts progressively adopt a pattern of greater absences.

The Salt Lake City study reported a similar pattern for dropouts and non-dropouts.

Intelligence Testing

Most of the I.Q. data used in this study were harvested from the results of a ninth grade testing of the study group's class. On occasion students showed testing at other times. To keep the data clean all I.Q.'s were converted to common number scores before statistical analysis was done. The results of that analysis were then converted back to I.Q. scores for presentation on the tables in this report.

The table on the following page displays the mean I.Q. and range of scores for the study group totally, by sex, and by dropouts and graduates.

MEAN I.Q. AND I.Q. RANGE

		Mean	Range
N (44)	Total	103	71 - 126
N (23)	Girls	103	78 - 122
N (21)	Boys	103	71 - 126
N (21)	Dropouts	98	71 - 122
N (23)	Graduates	108	90 - 126

These figures indicate that as a group the Chicano students had a rather normal range of scores. There seems to be no significant difference in I.Q. scoring as it relates to sex. However, between dropouts and graduates there appears to be a tendency for dropouts to be lower scoring on I.Q. instruments.

Philip D. Ortego has written scathingly about I.Q. testing and Chicanos. The following paragraph captures the results of his studies on the topic.

> About five percent of American school children score below seventy-five on I.Q. tests and are therefore considered mentally retarded. However, thirteen percent of Mexican American youngsters fall below seventy-five when tested. About twenty-five percent of all children score between seventy-five and ninety on I.Q. tests, but fifty percent of Mexican Americans fall in this range. Fifty percent of all children score between ninety and a hundred, but only twenty-five percent of Mexican American children score this high. Again, only twelve percent of Mexican American children scored above a hundred compared to twenty percent of all others.[1]

The following table looks at the I.Q. test results for the Chicano study group as they fall into the categories identified by Ortego.

Percent Falling Into Certain I.Q. Categories

	Total	Dropouts	Graduates
75 - Below	2%	5%	-
76 - 90	19%	33%	4%
91 - 100	20%	14%	26%
100 - Above	59%	48%	70%

[1] Philip D. Ortego, "Montezuma's Children," El Grito, A Journal of Contemporary Mexican American Thought, Vol III, No. 3, Spring, 1970, p. 43.

The point to be made here is that the Chicano students in Tooele grossly exceed his expectations for Mexican Americans and in fact exceed his expectations for the general population. This over scoring existed for dropouts as well as graduates.

Another way to look at I.Q. scoring is to compare the scores of the study group to national percentile rankings. The next table shows the percent of the total group and the percent of dropouts and graduates falling into national percentile categories.

Distribution of I.Q. Scores on National Percentiles

Percentile	Total	Dropouts	Graduates
1 - 25	14%	23%	4%
26 - 50	27%	29%	26%
51 -- 75	25%	19%	31%
76 - 100	34%	29%	39%

Some points may be made from this table: (1) fifty-nine percent of the study group scored above the fiftieth percentile; (2) seventy percent of the graduates scored above the fiftieth percentile as opposed to forty-eight percent of the dropouts; and (3) nearly one-fourth of the dropouts fell into the lowest percentile category. It is also interesting to note one point not made in the table; nearly ten percent of the study group scored above the ninetieth percentile.

It is frequently stated that I.Q. scores relate directly to the language spoken in the home. The table below reflects a mean score and range of scores for the total group, dropouts and graduates in terms of the language spoken in their homes.

Mean I.Q.'s and I.Q. Ranges for

Languages Spoken in Home

	English		Spanish		Both	
	Mean	Range	Mean	Range	Mean	Range
Total (44)	106	86-126	105	71-122	100	78-122
Dropouts (21)	103	86-119	102	71-122	90	78-103
Graduates (23)	108	97-126	118*		102	90-122

*Represents only one score

This indicates a slightly lower scoring by students from homes using both English and Spanish. Secondly those students from English speaking homes tended to score slightly higher than the other two groups. The range of scores in each language category precludes against concluding that language in the home predicts either a high or low I.Q.

In comparison to the Salt Lake City study and I.Q. the points may be made.

1. The range of scores for both study groups are nearly the same.
2. The mean I.Q. for the total Tooele study group was nearly ten points higher than the Salt Lake City group.
3. Tooele dropouts and graduates established a higher mean I.Q. than their counterparts in the Salt Lake City study.
4. Salt Lake City students also exceeded the expectations of Ortego, but not to the degree of Tooele's students.

Grade Point Average

The grade point average (G.P.A.) of a student reflects the official record of teachers evaluation of a students scholastic work. The table below looks at mean G.P.A.s and the range of G.P.A.s for various sub-groups.

Secondary School Mean GPAs and GPA Ranges

	Mean	Range
Dropouts	1.17	.25 - 2.2
Graduates	2.78	1.1 - 3.75
Female Dropouts	1.17	.25 - 2.2
Male Dropouts	1.13	.3 - 2.1
Female Graduates	3.04	1.83 - 3.75
Male Graduates	2.52	1.41 - 3.29

Another way to look at the same information is to view the percent of the total group and sub-groups falling into various G.P.A. categories. The table following holds that analysis:

Secondary School G.P.A. Distribution For Total Group and Subgroups

In Percent

G.P.A. Category	Total Subjects	Dropouts	Graduates	Female Dropouts	Male Dropouts	Female Grads.	Male Grads.
.25- .99	18	41	-	38	44	-	-
1.00-1.99	35	45	27	54	34	15	38
2.00-2.99	16	14	15	8	22	15	15
3.00-3.5	25	-	46	-	-	47	47
3.6+	6	-	12	-	-	23	-

Most of the data on the above two tables seems self-explanatory. It is interesting to point out that while no part of the dropout segment maintained at G.P.A. above 3.0, in fact 86% of that group fall below a 2.0, their counterpart graduate group had 58% maintaining averages above a 3.0.

Comparing this information to the Salt Lake City study one finds a similar pattern between dropouts and graduates. It is, however, noteworthy to mention that as total groups the Tooele group had much larger percent in the higher G.P.A. categories than did the SAlt Lake City group. This is reflected by comparing the 31 percent of the Tooele group above a 3.0 to the 9 percent of the Salt Lake City group above a 3.0. Finally in both studies the girls tended to achieve in school grades higher than boys but it was a much more pronounced finding in the Salt Lake City study.

In this study G.P.A. has been looked at in terms of other variables on which data were collected. The following table shows the mean G.P.A. of the total group, dropouts, and graduates and the mean I.Q. of these groups as it is reflected in terms of their mothers educational attainment. The table also reflects the percent of the particular group with mothers in the category of educational attainment.

G.P.A. and I.Q. and Educational Attainment of Mother

	0-4 yrs.	5-7 yrs.	8-10 yrs.	11-12 yrs.	13 yrs.
Dropouts					
Mean GPA	.45	1.26	1.58	1.14	
Mean I.Q.	89	103	102	103	
Percentage	15%	15%	25%	45%	
Graduates					
Mean GPA		3.29	2.88	2.78	
Mean I.Q.		114	110	106	
Percentage		5%	24%	71%	
Total					
Mean GPA	.45	1.77	2.23	2.16	
Mean I.Q.	89	106	106	105	
Percentage	7%	10%	24%	59%	

The following table considers the same information on students as the preceding one ... that data relates to fathers educational attainment.

G.P.A. and I.Q. and Educational Attainment of Father

Dropouts

	0-4 yrs.	5-7 yrs.	8-10 yrs.	11-12 yrs.	13 yrs.
Mean GPA	.28	1.2	1.13	1.4	1.62
Mean I.Q.	71	98	100	106	119
Percentage	10%	40%	15%	30%	5%
Graduates					
Mean GPA	2.4	2.77	2.47	3.17	
Mean I.Q.	-	115	102	111	
Percentage	5%	9%	38%	48%	
Total					
Mean GPA	.98	1.51	2.10	2.49	
Mean IQ	-	102	100	110	
Percentage	8%	25%	27%	40%	

One can readily see that the lowest G.P.A.'s and lowest I.Q.'s fall into those categories where the mother or father fits into the lowest attainment category. In terms of I.Q. and G.P.A. as they relate to mothers education one does not find them to necessarily increase as the education of the mother increases. Fathers education, however, seems to be somewhat more related to G.P.A. and I.Q. One might be led, by these findings to speculate that father's education may be significant in terms of G.P.A. and I.Q. scoring. One other point needs to be made, and that is that while 50 percent of the dropout's fathers have 7 years or less education at the same time 48 percent of the graduate's fathers have more than 11 years education.

Another item often mentioned that may affect G.P.A. is the language spoken in the home. The following three tables reflect mean G.P.A. for dropouts, graduates

and the total study group as reflected by looking at them in terms of the language spoken in their homes.

Language in Home and GPA of Dropouts

	English	Spanish	Both
Mean GPA	1.22	1.10	1.12
Range	.25-2.17	.3-2.1	.63-1.8

Language in Home and GPA of Graduates

	English	Spanish	Both
Mean GPA	2.73	3.09	2.80
Range	1.41-3.75	2.42-3.75	1.83-3.42

Language in Home and GPA of Total

	English	Spanish	Both
Mean GPA	2.09	1.54	2.29
Range	.25-3.75	.3-3.75	.63-3.42

The lack of any pattern of dominance in either high scoring or a truly different range of scores pattern for any of the language groups leads one to conclude that language used in the home does not in and of itself predict students performance in scholastic achievement.

Another often mentioned factor, which determines achievement in school is the size of the students family. The following looks at the mean family size for students whose G.P.A.'s fall into certain categories.

Family Size and G.P.A.

Graduates
Gra

GPA	Mean Size of Family
.25-.99	
1.00-1.99	6
2.00-2.99	4
3.00-3.5	5.5
3.6 +	4

Dropouts

GPA	Mean Size of Family
.25	6.7
1.00-1.99	5.1
2.00-2.99	5.3
3-3.5	
3.6 +	

This analysis shows a tendency for students from larger families to do less well in teacher evaluations than students from large families. However, the mean size of the families are not different enough to make this a strong conclusion. Later in the report family size as it relates to dropping out will be analyzed.

An attempt was made to look at G.P.A. and I.Q. as they relate to religious preference. Since 85% of the study group claimed Catholicism as a religion, analysis became rather meaningless. In reference to questions people in this state might ask one could find Catholic or L.D.S. students achieving very well or very poorly as well as dropping out or graduating from school.

Standardized Testing

Two sets of achievement test data were available of the Chicano student study group. The first analysis looks at data on the entire group taken during the fifth grade year of their school experience. The second set will be looked at only for graduates since the test was administered in the eleventh grade and was nearly incomplete for dropouts.

The following two tables express the percent of dropouts and graduates falling into categories of grade level achievement in the fifth grade.

Dropouts

	Years Below ←			Grade Level	→ Years Above		
	2.4-2.1	2.0-1.1	1.0-.1	5.5 yrs	.1-1.0	1.1-2.0	2.1-2.3
Vocabulary	.19	.19	.50	-	.06	.06	-
Reading	.19	.31	.25	-	.13	.12	-
Spelling	.18	.25	.25	-	.13	.13	.06
Total Language	.18	.25	.31	-	.13	.13	-
Total Work Study	-	.25	.44	.06	.19	.06	-
Total Math	.12	.19	.25	.06	.19	.19	-
Composite	.13	.31	.31	-	.19	.06	-

Graduates

	Years Below ←			Grade Level	→ Years Above		
	2.4-2.1	2.0-1.1	1.0-.1	5.5 yrs	.1-1.0	1.1-2.0	2.1-2.3
Vocabulary	.11	.27	.11	.06	.39	.06	-
Reading	-	.27	.11	.06	.45	.11	-
Spelling	-	.06	.27	-	.33	.22	.12
Total Language	.06	.06	.27	.06	.38	.17	-
Total Work Study	-	.06	.27	.06	.27	.17	.17
Total Math	.06	.33	-	.50	.06	.06	
Composite	.06	.17	.22	-	.50	.06	-

The data reflected above indicate some interesting behavior by dropouts and graduates as early on in their school careers as the fifth grade.

1. In every category tested more than fifty percent of the dropouts were below grade level.
2. A minimum of 56% of dropouts and a maximum of 88% of dropouts scored below grade level in every area tested.
3. The composite score, a general overview of the students achievement status, for dropouts indicates most of them were doing poorly at this level of elementary achievement.
4. In every area tested at least 51% of the graduates and a maximum of 67% of the graduates scored at grade level or above.
5. The composite score for graduates places the majority of them above grade level in achievement.

One may also look at the scoring of the group on standardized tests against district norms. The following table looks at dropout and graduate mean scores on achievement tests and compares them to the norms established by their entire class in the fifth grade.

Achievement Score Means on Graduates and Dropouts Compared to Total Class Norms

	Dropout Mean Grade Level	Class Grade Level Norm	Graduate Mean Grade Level
Vocabulary	4.4	5.5	4.8
Reading	4.5	5.8	5.1
Spelling	4.8	5.9	6.2
Total Language	4.7	5.9	5.6
Total Work Study	4.9	5.6	6.1
Total Math	4.9	5.0	5.8
Composite	4.8	5.5	5.4

This table shows us that the mean grade level score for dropouts was below the class norm as well as national norms in every area tested. For graduates we find a mean score below the norm in four of the seven areas tested. However, only in vocabulary and reading are they significantly lower. It is interesting to note that the graduates exceed a 5.5 national norm in four of the areas tested. Finally, the areas of worst performance for Chicano graduates and dropouts were the same vocabulary and reading. Although earlier analysis suggests language in the home did not necessarily relate to I.Q. or G.P.A., this weakness in reading and vocabulary in the total study group opens again the question of language in the home and school achievement.

As mentioned earlier the study group also took standardized tests in the eleventh grade. Since test data existed on less than one-forth of the dropouts, the results of this testing are analyzed for only the graduate group. The following table reflects the percent of the graduate group falling on grade level or in various categories above and below grade level on this battery of standardized tests.

Percent of Graduates Related to Grade Level on Standardized Tests

	Years Below ←				Grade Level	→ Years Above	
	3.7-3.1	3.0-2.1	2.0-1.1	1.0		.1-1.0	1.1-2.1
Social Studies	-	.17	.06	.22	-	.44	.11
Natural Science	.11	.06	-	.44	-	.22	.17
Correct Expression	.11	-	.11	.17	-	.33	.28
Quantitative Thinking	-	.06	.06	.11	.06	.27	.44
Reading Average	-	.11	.06	.27	-	.56	-
Vocabulary	-	.11	.11	.28	-	.17	.33
Composite	-	.10	.06	.22	.06	.50	.06

This data tells us the following about the graduates in the study group:

1. In all areas tested, except natural science, more than fifty percent of the graduates scored at grade level or above.
2. In quantitative thinking more than 75 percent of graduates scored at grade level or above.
3. The composite score percentage indicates a majority of the graduates achieving above average for their grade in school.

This information may also be viewed in terms of the mean achievement of the graduate group. The table below shows the difference below or above the national norm of the mean score of the graduate group in each test area. The table also shows the range of scores in terms of the degree above or below the national norm the scores fell.

Mean Achievement for Graduates

	Difference Between + Mean and National Norm	Range
Social Studies	-.2	-2.8 to + 1.9
Natural Science	-.4	-3.7 to + 2.1
Correct Expression	-.2	-3.7 to + 1.6
Quantitative Thinking	+.5	-2.3 to + 2.1
Reading Average	No Difference	-2.8 to + .9
Vocabulary	No Difference	-2.8 to + 1.6
Composite	No Difference	-2.5 to + 1.3

This analysis indicates that considered as a group the graduates achieved right around grade level not varying more than half a grade above or below in any category. At the same time the ranges indicate a wide diversity of achievement scoring. This would indicate that for Chicano students who graduated, that other influences kept them in school other than just doing well scholastically.

The test information from elementary school was looked at to see if any pattern of achievement test scoring as it relates to parental educational attainment could

be established. Essentially no such pattern could be established. There did seem to be an influence for graduates in relationship to fathers education where the mean composite score increased consistently with the amount of father's education. This pattern, however, did not hold for father's education and achievement for dropouts. The level of mother's education did not seem to influence testing scores for dropouts or graduates.

Achievement test scores were also analyzed for the influence of language spoken in the home. For graduates no differences existed in an analysis of composite scores for students from the three possible language backgrounds. For dropouts, the mean composite score for children from Spanish speaking homes was slightly above grade level. For dropouts from English speaking homes the mean composite score was one grade below grade level. Not enough cases of dropouts from homes using both languages existed for analysis.

Its very difficult to compare the achievement test data from this study with the study done in Salt Lake City since different tests were used and testing took place at different grade levels. Given that one should take the following comparison with extreme caution.

1. It seems that the Chicano students in Tooele as a group scored much better on achievement tests than the Salt Lake City group.
2. A much greater percent of the Salt Lake City study group scored below national and local norms than the Tooele group.
3. The pattern of below norm scoring for dropouts occurred in both studies. However, in Salt Lake City non-dropouts also tended to score below national norms.
4. The pattern of dropouts doing less well on achievement tests held in both studies.
5. The most basic difference between the groups seems to be a much better performance by students who stay in school in Tooele than their counterparts in Salt Lake City.

Family Items

The educational attainment of parents is often discussed as significant for Chicanos and for dropouts. The table below looks at the mean number of years schooling completed for mothers and fathers of the study group.

Parents Educational Attainment
In Years of Schooling Completed

	Father			Mother		
	(N)	Mean	Low-High Range	Mean	Low-High Range	(N)
Dropouts	21	8.76	4 - 14	8.90	0 - 12	21
Graduates	20	9.62	2 - 12	10.73	5 - 12	20
Total	41	9.19	2 - 14	9.82	0 - 12	41

This table tells us that both parents, mothers and fathers, of graudate tended to be more educated than the parents of dropouts. Further, that in both categories, graduates and dropouts, mothers tended to have completed more years of school than fathers. Finally, the data show a rather low level of educational attainment by both parents of the total group compared to current social norms.

The next two tables look at the percent of mothers and fathers of dropouts and graduates who fall into categories of educational attainment.

Educational Attainment of Parents By Percent

Fathers

Years of School Completed

	(N)	0-4	5-7	8-10	11-12	13+
Dropouts	21	10	38	14	33	5
Graduates	20	5	10	40	45	-
Total	41	.8	24	27	.39	.2

Educational Attainment of Parents by Percent

Mothers

Years of School Completed

	(N)	0 4	5-7	8-10	11-12	13+
Dropouts	21	14	14	24	48	-
Graduates	20	--	5	30	65	
Total	41	7	10	27	56	

It is interesting to note that 48 percent of the dropouts fathers had seven years or less education while only 28% of dropouts mothers fell into that range. This analysis also corroborates the point that graduates parents generally had completed more years of school than dropouts parents. Finally, the point is made that 44 percent of the mothers and 59 percent of the fathers had less than eleven years of schooling completed.

Earlier the size of the family was discussed as it related to G.P.A. In analyzing the information on family size of the study group we find dropouts with a mean family size of six children and graduates with a mean family size of five children. Dropouts came from families ranging in size from three to nine children. Graduates came from families ranging in size from one to eleven children. One other way to consider size of family is to look at the percent of dropouts and graduates coming from various size families. The following table considers this.

Size of Family in Percent

Number of Children ⟶	1-4	5	6 or more
Dropouts (23)	30%	9%	61%
Graduates (26)	38%	28%	34%

This combined with the other analysis shows a tendency for dropouts to come from larger families and a tendency for graduates to come from families of five or less children.

Comparing parents education and family size to the findings of the Salt Lake City study, one finds the following:

1. The two studies were opposite in that in the Tooele study parents of graduates tended to have more years completed than the parents of dropouts while in the Salt Lake City study the reverse held true.
2. In Tooele mothers tended to have more education than fathers whereas in Salt Lake mothers of dropouts had slightly more education than fathers of dropouts and fathers of non-dropouts tended to have slightly more education than mothers of non-dropouts.
3. The mean level of years school completed for mothers and fathers in Tooele and Salt Lake city was between 9 and 10 years for both studies.
4. The range and mean family size in both studies for the total groups in both studies were approximately the same.
5. While smaller family size in Tooele seemed related to positive school achievement and not dropping out, in Salt Lake City the highest achieving non-dropouts tended to come from the largest families.

The occupation or job held by mothers and fathers is of interest. The following table shows the percent of mothers and fathers working in various occupational categories. (See next page)

Parents' Occupation by Percent

Fathers

	Graduates (N) 26	Dropouts (N) 23	Total (N) 49
Professional	4%	-	2%
Semi-professional	-	4%	2%
Clerical	15%	-	8%
Sales & Service	-	-	-
Agricultural	-	-	-
Skilled	38%	48%	43%
Semi-skilled	35%	35%	35%
Unskilled	8%	13%	10%
Unemployed	-	-	-

Mothers

Professional	-	-	-
Semi-professional	-	-	-
Clerical	12%	-	6%
Sales & Service	12%	4%	8%
Agricultural	-	-	-
Skilled	-	4%	2%
Semi-skilled	7%	13%	10%
Unskilled	-	-	-
Housewife	69%	79%	74%

These figures provide us little insight into differences between dropouts and graduates. They do tell us the following about the Chicano study group in general:

1. The majority of fathers work in skilled or lesser status positions.
2. The majority of mothers do not work for others, but as housewives.
3. All fathers had some form of employment.

Compared to the finding of the Salt Lake City one finds that:

1. A greater percent of working mothers particularly for dropouts in Salt Lake City.
2. No unemployment for fathers in Tooele, but approximately ten percent of fathers unemployed in Salt Lake City.
3. The majority of fathers and working mothers in both studies held positions rated as skilled or lesser status.

At the beginning of data collection we speculated that religion might be different for dropouts and graduates. We found, however, that 77 percent of the dropouts and 88 percent of the graduates came from Catholic families. Looking at the total study group we found the following religious affiliations: (1) 83 percent Catholics, (2) 11 percent L.D.S., and (3) 6 percent Protestant religions.

We found the incidence of a broken or divorced home to occur in thirteen percent of the dropout homes and four percent of the graduate homes. Actually, less than ten percent of the study group came from broken homes. The incidence of divorce being so small leads one to conclude it did not seriously affect either dropping out or graduating from high school. Looking at the Salt Lake study one finds little incidence or influence of broken homes, in fact non-dropouts had a slightly higher percent of broken homes than dropouts.

The use of Spanish or English as the language in the home frequently is considered a major influence on Chicano students. Some of the earlier discussions considered that in looking at scholastic behavior, the table on the following page looks at the percent of homes using either Spanish, or English, or both languages.

Language in Home by Percent

	English	Spanish	Both Languages
Graduates	56	7	37
Dropouts	50	32	18
Total	53	18	29

These figures tell us that at least half of graduates and dropouts came from homes using English as the home language. They also tell us that a considerably larger percent of dropouts came from homes using Spanish as the home language. Although there is some difference in the language in the home pattern, our findings on other variables make it very speculative to conclude that the use of Spanish or English in the home determines the quality or length of school experience.

Comparing this to the Salt Lake City study we find very different patterns. Only seventeen percent of the Salt Lake City group used English as the home language and only one percent used Spanish as the home language. The large majority of the Salt Lake study group came from homes using a Spanish-English combination.

The last item to be analyzed is one done more out of curiosity than any evidence from former studies or information. The table below shows the percent of parents and students being born in various areas.

Percentage of Birthplaces of Students and Parents

Dropouts

	Utah		New Mexico	Other
Students	Tooele 35%	Other 35%	17%	13%
Father	Utah 5%		New Mexico 67%	Other 28%
Mother	Utah 14%		New Mexico 53%	Other 33%

Percentage of Birthplaces of Students and Parents

Graduates

	Utah		New Mexico	Other
Students	Tooele 76%	Other 12%	-	12%

	Utah	New Mexico	Other
Father	8%	69%	23%

	Utah	New Mexico	Other
Mother	23%	77%	-

One of the most important pieces of information on this table relates to curriculum development in Tooele district. If they attempt to develop culturally plural or bi-lingual programs, it will be very helpful to know that the New Mexico heritage and culture adhere to a great deal of their Chicano population.

Secondly, it is interesting to note that 76 percent of the graduates were born in Tooele while only 35 percent of the dropouts were born there. This may very well be a coincidental finding or it may point out something significant. In the suggestions which follow a heuristic use of this information is articulated.

One last note should be made on the items discussed under family. Although only forty-nine students were considered in the study group, one hundred twenty-more school age children in the district are members of the same families as brothers and sisters of the study group. This would tend to add a quality of generality to the findings on family at least.

Suggestions:

The following list of suggestions exclusively relate to questions suggested by this research and potential further research.

1. Dropouts. The data for this study indicate two distinct categories of dropouts:

a. The student who on all measures of achievement and intelligence scores low. This student's elementary evaluation indicates poor to fair progress and may even receive "social promotions." He or she has a continuous record of low performance.

b. The student who scores on measures of achievement or intelligence at the average or above average level. The elementary evaluations of this student ranges from good to very good. He or she then begins functioning at the near failure level somewhere between the sixth and ninth grade.

Study needs to be done to find out if district programs and resources have been arranged to accommodate the educational needs of student "A". Further, it should inquire into the diagnostic capability for accurately diagnosing the strengths and weaknesses of these students.

Study also needs to be done to consider at least the social, emotional, and familial variables that may influence student "B" mentally and eventually physically to drop out.

2. Acculturation. The heuristic value of the findings on place of birth could lead to a study of the effect of having been born and reared in a community to which the students family has acculturated. Several serious questions could be explored as to the influence of this family variable during the early adolescent years when peer and social acceptance become so important. One could speculate on the educational implications for the child who does not receive from his family the value and behavior norms of the local area.

3. A broad range study is implied by the many contradictions between the Salt Lake City study and the current one. One consideration might be a study that attempts to build a model for the Chicano student and his family as they relate to particular locales or environments; such as--urban, rural, suburban. It may be that the significant characteristics are in large

measure related to the locality of the student's home. If this were true we could stop trying to generalize inaccurately about the Chicano in Utah.

4. A final suggestion would be for a follow-up study attempting to interview Chicano students now in Tooele Schools. Such areas as attitudes toward the schools, the teachers, and the community would be very valuable.

Finally, I would suggest that the District not give up its standardized testing program. It may not be a valid way to categorize or label students, but it can be an exceptional research tool for the district. As bad as standardized tests may be, they provide us more valid and useable information than simple guessing or speculating. Lastly, if we understand all of the reservations we should hold about using tests to measure children's ability or intelligence, we may still adopt the point of view that they help us evaluate the school district and its programs.